

**Listing of Claims**

1. (Original) A method for sending a message stored in the memory of a first data processing system into the memory of a second data processing system, said method comprising the steps of:

transmitting said message from said first data processing system to a temporary memory in an adapter which is connected to said second data processing system;

transferring, from said adapter to said second data processing system, an indication that the temporary memory in said adapter contains the message received from said first data processing system;

transferring, from said second data processing system to said adapter, real address information indicating desired target memory location for said message;

transferring said message, from said temporary memory in said adapter, directly into target memory locations in the memory of said second data processing system, said transfer occurring via direct memory access;

transferring, from said adapter to said second data processing system, an indication that said target locations now contain the message received from said first data processing system; and

transmitting an acknowledgment of receipt of said message from said second data processing system to said first data processing system.

2. (Original) The method of Claim 1 further including the step of advancing indicators in said first data processing system in preparation of transmitting another message, whereby a number of messages may be sent in rapid sequence.

3. (New) A method for sending a message from a first data processing system to the memory of a second data processing system, said method comprising the steps of:

establishing an association between said message and real address information indicating desired target memory locations for said memory;

transmitting said message from said first data processing system to a temporary memory in an adapter which is connected to said second data processing system;

transferring, from said adapter to said second data processing system, an indication that said temporary memory in said adapter contains the message received from said first data processing system;

transferring, from said second data processing system to said adapter, said real address information;

transferring said message, from said temporary memory in said adapter, directly into said target memory locations in the memory of said second data processing system, said transfer occurring via direct memory access;

transferring, from said adapter to said second data processing system an indication that said target locations contain the message received from said first data processing systems; and

transmitting an acknowledgment of receipt of said message from said second data processing system to said first data processing system.

4. (New) A method for message transmission from a first data processing system to a second data processing system, said method comprising the steps of:

establishing an association between memory buffer areas in said data processing systems wherein said association includes specification of real address information at said second data processing system;

transferring said message from said first data processing system to an adapter attached to said second data processing system together with a tag which includes said association; and

transferring said message from said adapter which uses said tag to transfer said message directly to memory locations in said second data processing system specified by said real address information.